

Administrative Structure and Operating Guidelines

1 Scope

1.1 The Trace Evidence Unit (TEU) is assigned to the Scientific Analysis Section of the FBI Laboratory.

1.2 The Scientific and Biometrics Analysis Unit (SBAU) is assigned to the Terrorist Explosive Device Analytical Center (TEDAC) Section of the FBI Laboratory. SBAU-Trace is a group within SBAU.

1.3 This document applies to individuals assigned to the TEU and SBAU-Trace.

2 Mission Statements

2.1 The TEU provides scientific examinations of physical evidence in the areas of hairs, fibers, fabric, cordage, glass, geologically-derived materials, and skeletal material; expert testimony relating to these examinations in legal proceedings; training to the law enforcement community; forensic field support in FBI cases; and develops and implements new technologies to enhance scientific examinations.

2.2 The SBAU conducts latent print, DNA, trace, and toolmark analysis and related instrument operation support to provide actionable intelligence from IED materials to the United States Government and its partners in a continual effort to access, defeat, and counter the IED threat.

3 Organizational Structure

3.1 The TEU is composed of a Unit Chief (UC), Supervisory Physical Scientist-Forensic Examiners (SPS-FE), Physical Scientist-Forensic Examiners (PS-FE), Geologist-Forensic Examiners (G-FE), Physical Scientists (PS), and contractors. The administrative structure is designed to clearly define a chain-of-command and to establish corresponding responsibilities and duties. The TEU is divided into three groups: Anthropology, Hair and Fiber, and Geology. Personnel are assigned to a group based on their position description.

3.1.1 The Hair and Fiber group performs analysis within the Materials (Trace) discipline, specifically the sub-discipline of Hairs and Fibers.

3.1.2 The Anthropology group performs analysis within the discipline of Anthropology.

3.1.3 The Geology group performs analysis within the Materials (Trace) discipline, specifically the sub-discipline of Geology.

3.2 The SBAU-Trace group performs analysis within the Materials (Trace) discipline, specifically the sub-discipline of Hairs and Fibers. SBAU-Trace is composed of a SPS-FE, PS-FEs, and PSs. The administrative structure of the SBAU is designed to clearly define a chain-of-command and to establish corresponding responsibilities and duties.

3.3 The use of the term discipline in this document will include sub-disciplines as listed above.

3.4 Each discipline has a TL who reports to his/her UC or assigned supervisor and works with the affected UCs, when applicable, to ensure technical continuity for the discipline. Qualified SPS-FEs, PS-FEs and G-FEs may serve as the TL in their discipline. A UC may also serve as a TL if they are a qualified PS-FE within the Hairs and Fibers, Anthropology, and/or Geology disciplines.

4 Responsibilities

4.1 Unit Chief

- Manages the daily operation of their unit.
- May perform administrative reviews of reports.
- Conducts annual reviews on all unit employees unless otherwise designated.
- Performs 90-day file reviews with all Forensic Examiners unless otherwise designated.
- Observes and evaluates activities of personnel on a regular basis.
- Sets performance measures by which the Unit's mission is fulfilled.
- Handles special projects from their Section Chief.
- Recommends and approves formal training opportunities for employees to ensure continuing education.
- Maintains regular contact with their Section Chief.
- Oversees Unit meetings.
- Attends their Section meetings.
- Maintains direct contact with other appropriate units within the FBI Laboratory.
- Maintains contact with other appropriate units within the FBI.
- Prepares written and oral communications in conjunction with the field, other divisions, and the law enforcement community.
- Maintains, expands and improves liaison contacts to enhance the attainment of Unit performance measures.
- Provides 24-hour availability to address national and international crises.
- Manages assigned programs according to FBI/DOJ policies, guidelines, and procedures.
- Ensures that their quality assurance program complies with the FBI Laboratory Quality Assurance Manual (QAM) and FBI Laboratory Operations Manual (LOM) requirements.
- Ensures that their unit complies with all FBI policies.

- Ensures that one qualified individual is designated to serve as TL for each discipline or sub-discipline.
- Approves corrective actions after completion of action steps and verification of effectiveness, if required.
- Authorizes major deviations prior to submission to FASU.
- Ensures a list of concession and/or corrections is maintained per the LOM – *Practices for Addressing a Nonconformity*. This list will be reviewed on an annual basis.
- Ensures a list of minor deviations is maintained and reviewed on an annual basis to determine if any trends are occurring.

4.2 Supervisory Physical Scientist - Forensic Examiner

- Performs administrative reviews of reports.
- Performs technical reviews of casework in their category of testing.
- Makes critical evaluations on the acceptance and assignment of casework to FEs based on expertise and caseload.
- Maintains the case log if required in assigned unit.
- Conducts annual reviews on unit employees they are assigned to supervise.
- Performs 90-day file reviews with all FEs they are assigned to supervise.
- Observes and evaluates activities of personnel they are assigned to supervise on a regular basis.
- Advises UC on performance measures by which the Unit's mission is fulfilled.
- Recommends formal training opportunities for employees to ensure continuing education.
- Provides 24-hour availability to address national and international crises.
- Serves as an FE in the discipline in which they are qualified.
- Serves as a Subject Matter Expert (SME) for Court Testimony Monitoring for their discipline.
- Serves as acting UC, when designated.
- Authorizes minor deviations.

4.3 Technical Leader

- Accountable for technical operations within their discipline, including training, quality assurance, proficiency testing, and validation.
- Authorizes suspension/termination of operations within their discipline if it is determined that current casework operations have been compromised or may become compromised. If it becomes necessary to suspend operations, they must notify the affected unit's UC(s) and are responsible for documenting the situation in an electronic communication (EC) to inform executive management.
- Directs, reviews, and approves all developmental validation, internal validation, or validation of a material modification within their discipline.

- Manages the research, development, and validation of new technical procedures for use in casework within their discipline.
- Ensures an annual review is performed of the applicable quality system documents, including the technical procedures within their discipline, training, and proficiency testing.
- Approves applicable quality system documents, including the technical technical procedures within their discipline, training, and proficiency testing.
- Performs technical reviews of casework in their discipline.
- Provides technical expertise and approval to UCs for major deviations and corrective actions.
- Approves corrective actions prior to submission to Forensic Analysis Support Unit (FASU), if required.
- Approves minor deviations of a technical nature under their discipline.
- Ensures that PS-FE, G-FE and PS in their discipline are qualified for their assigned work responsibilities in accordance with the QAM and LOM requirements.
- Serves as a SME for Court Testimony Monitoring for their discipline.
- May delegate their duties to a qualified examiner in the same discipline, but the final work product remains the responsibility of the TL.
- Serves as a Forensic Examiner in the discipline in which they are the TL.
- Serves as acting UC, when designated.
- Will inform the UC of any necessary concessions and/or corrections as per the LOM – *Practices for Addressing a Nonconformity*.

4.4 Forensic Examiner

- Receives, assesses and examines evidentiary material.
- Conducts critical evaluation of evidence in order to properly manage examinations performed on cases.
- Performs comprehensive and authoritative analyses of evidence.
- Provides technical leadership and communication with contributors in regard to case acceptance and feasibility of requested examinations.
- Prepares case notes, Laboratory reports, and other relevant communications to document facts pertaining to evidence received, analyses performed, procedures used, and the significance of the results obtained.
- Performs administrative review of Laboratory reports if delegated to do so.
- Performs technical review of Laboratory reports in their discipline, if requested by TL.
- Researches, develops, and validates new technical procedures for use in casework.
- Prepares and presents ideas, recommendations, conclusions and analytical procedures to peers, superiors, subordinates and the public, including courtroom testimony.
- Trains and mentors new employees in their area of expertise.

- Serves as a SME for the FBI pertaining to the collection, submission, and examination of evidence, as well as courtroom testimony in their discipline.
- Provides support and analyses at major crime scenes when necessary.
- Manages a major program within their unit (GS-14 only), where applicable.
- Provides 24-hour availability to address national and international crises.
- Handles special projects assigned by their UC.
- Assists in maintenance of Unit databases in their area of responsibility.
- Serves as acting UC, when designated.
- Serves as acting TL in their discipline, when designated.

4.5 Physical Scientist

- Receives, assesses, examines, and ensures proper transfer and return of evidentiary material.
- Performs comprehensive analyses of evidence under the supervision of a Forensic Examiner.
- Prepares case notes to document facts pertaining to evidence received, analyses performed, and procedures used.
- Researches, develops, and validates new technical procedures for use in casework.
- Serves as a SME for the FBI pertaining to the collection, submission, and examination of evidence in their discipline.
- Trains and mentors new employees in their area(s) of expertise.
- Provides support and analyses at major crime scenes when necessary.
- Handles special projects assigned by their UC.
- Assists in maintenance of Unit databases in their area of responsibility.

4.6 Management and Program Analyst

- Responsible for performing administrative tasks and providing support to unit/program operations and projects.
- Analyze issues relating to the management of administrative/operational programs.
- Perform a variety of management/program analysis functions to identify inefficiencies; streamline processes; eliminate redundancies; evaluate performance measures; and ensure processes meet valid requirements.
- Analyze proposed changes involving the establishment, discontinuance, consolidation, or regrouping of methods and procedures to determine their adequacy and probable effectiveness and to identify overlapping functions or systems.
- Oversee the development of policy; establish policy; evaluate existing policy; and provide solutions to issues that arise.
- Research policies, directives, and regulations to evaluate and develop new ideas and techniques to affect changes in methods, procedures, and the organization.

- Provide guidance and direction to other employees in developing and applying management/program concepts and analytical techniques to operational and technical problems.
- Direct and/or participate in special and ad-hoc projects, working groups, and/or task forces of a widely diverse and complex nature.
- Develop budget estimates and justifications; ensure funds are used in accordance with the operating budget; recommend transfers or reallocation of funding based on rates of expenditure; and compare current and historical information regarding resource allocations to identify trends and determine reasons for same.
- Assess current organizational/program assignments and responsibilities through research, interviews, and observations.
- Determine organizational/program priorities and ensure effective utilization of resources.
- Compile, prepare, present, and defend recommendations, findings, briefings, narrative summaries, and statistical analysis in complex written reports and documents to executive management and external entities.

4.7 Contractor

Contractors are employed on a contractual basis based on unit needs and may perform tasks similar to the Forensic Examiners or Physical Scientists. All contractors will be required to meet the applicable provisions of the FBI Laboratory quality system including successful completion of the appropriate FBI Laboratory training program as well as annual proficiency testing.

5 Personnel Matters

In addition to any requirements set forth by FBI policies, the following procedures are followed:

- All personnel are given an annual performance review. This review is conducted by the appropriate supervisor. Each employee is also given a progress review midway through their rating period.
- Sick leave, annual leave, compensatory leave, and overtime are approved by the appropriate UC or SPS-FE.
- Training, presentations, participation in schools, tours and other matters must be approved by the appropriate chain of command.
- Travel vouchers will be reviewed and approved by the appropriate UC or Supervisor.
- All personnel must annually fulfill and record the continuing education requirement for their discipline as described in the Trace Evidence Quality Manual *Continuing Education and Additional Post-Qualification Training*. This training must be approved by the appropriate Unit Chief, or designee.

6 Field Office Assistance/Crime Scene Response

Requests for assistance on crime scenes must be directed to the Unit Chief of the Evidence Response Team Unit. These requests must be approved by the appropriate Unit Chief, who must also seek approval from the appropriate Section Chief.

7 Purchasing Supplies and Services

Federal and FBI Finance Division Procurement Policies and Regulations govern the procurement of products and services from sources external to the FBI. Purchasing priority will be given to Government supply sources including but not limited to the General Services Administration (GSA) wholesale supply source. Supplies, reagents, and consumables must comply, when appropriate, with specifications defined within specific technical procedures.

7.1 Procurement

Personnel requiring items or the Unit Purchase Card holder will complete a credit card purchase request or requisition, based on total cost, with the needed items and identified vendor. Descriptions of supplies, reagents and consumables ordered will contain enough detail to ensure that items received are adequate for use, if they affect the quality of examinations. After the Unit Chief or Supervisor signs off on the purchase, the individual filling out the purchase request will coordinate with an assigned purchase card holder or, if the unit has one, the Management and Program Analyst (MAPA), for entry into the Purchase Card Authorization and Reconciliation Tool (PCART).

7.2 Receipt and Storage

Supplies, reagents, and consumables for the TEU and SBAU-Trace are received through the appropriate Laboratory mailroom, obtained from the Laboratory's Asset Management Group (AMG) or TEDAC Supply Room, or acquired directly from vendors. Procured items will be inventoried when received to ensure accurate fulfillment of request. All purchasing documents should be provided to the purchase card holder, MAPA, and/or the requisition submitter. Purchases will be reconciled in PCART, or appropriate system. Acquired supplies, reagents, and consumables will be stored appropriately (*e.g.*, acids are kept in an acid safe storage cabinet). Adequate supplies to meet immediate needs are kept on hand and re-stocked as needed.

7.3 Quality of Supplies, Reagents and Consumables

Supplies, reagents and consumables that can affect the quality of analysis must be verified prior to use. If the quality of the new supply, reagent or consumable has not been shown to meet the requirements of the analysis, it will not be used. Materials requiring quality checks prior to use and the method for checking their quality are identified in the individual technical procedures dictating their use. Quality checks will be recorded, and the documentation will be maintained with the instrument.

In addition, the reliability of critical reagents will be verified at each use. This verification typically consists of use of the reagent during calibration verification and/or preparation of blank samples (see Trace Evidence Procedures Manual *Refractive Index of Glass By GRIM* and *Elemental Analysis of Glass by Inductively Coupled Plasma-Optical Emission Spectrometry (ICP-OES)*) or through the performance of a specific test which is described in the individual procedure (Trace Evidence Procedures Manual *Geologically-Derived Materials Examinations*).

7.4 Approved Suppliers

7.4.1 The following are approved vendors for critical consumables, supplies, and services that may affect laboratory activities:

Fisher Scientific

- 49% hydrofluoric acid (HF) (Optima Grade, equivalent or better)
- Concentrated hydrochloric acid (HCl) (Optima Grade, equivalent or better)
- Concentrated nitric acid (HNO₃) (Optima Grade, equivalent or better)

Foster & Freeman, LTD. (Locke oils)

High Purity Standards (ICP-OES calibration standards) Spex Certiprep (scandium standards)

VWR Scientific

- 49% hydrofluoric acid (HF) (Optima Grade, equivalent or better)
- Concentrated hydrochloric acid (HCl) (Optima Grade, equivalent or better)
- Concentrated nitric acid (HNO₃) (Optima Grade, equivalent or better) NIST (Hydroxyapatite Standard)

7.5 Services

7.5.1 Service for the TEU Thermo Fisher iCAP 6500 Duo ICP-OES is provided by an approved outside vendor, such as Unity Lab Services.

7.5.2 TEU may contract for additional services with outside vendors as appropriate.

7.5.3 SBAU-Trace may contract for additional services with outside vendors as appropriate.

Rev. #	Issue Date	History
4	02/03/2020	<p>Removed Trace Evidence from title.</p> <p>Removed all reference to Post Mortem Imaging, Visual Information Specialist, and Evidence Management Unit throughout.</p> <p>Updated SBAU-Trace group name throughout and included job titles in Sections 1.2 and 1.2.1.</p> <p>Changed 'geological' to 'geologically-derived' throughout.</p> <p>Changed 'his/her' to 'their' and 'he/she' to 'they' throughout.</p> <p>Updated wording in Sections 2.2, 3.1, 7, 7.1, 7.2, 7.4.1, 7.5 and the lists in Sections 4.1, 4.2, and 4.4.</p> <p>Added Section 3.2.</p> <p>Updated TE document titles throughout.</p> <p>Removed case acceptance policy.</p>
5	05/03/2021	<p>Updated throughout to change category of testing to discipline.</p> <p>Changed standard operating procedures/SOPs to technical procedures throughout.</p> <p>Changed the Mineralogy group name to Geology.</p> <p>Moved detailed organizational details from Scope to Section 3.</p>

Approval

Redacted - Signatures on File

Trace Evidence Unit Chief: Date: 04/30/2021

Scientific and Biometrics
Analysis Unit Chief: Date: 04/30/2021

Hairs and Fibers Technical
Leader: Date: 04/30/2021

Geology Technical Leader: Date: 04/30/2021

Anthropology Technical
Leader: Date: 04/30/2021

QA Approval

Quality Manager: Date: 04/30/2021